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ABSTRACT

Although most educators support the concept of integrating academic and vocational education and recognize the benefits it affords students, implementation of integrated curriculum and instruction is seen as problematical. One myth is that successful integration relies solely on teacher commitment and cooperation. The reality is that although teachers play a significant role in integrating academic and vocational education, they cannot effect significant change in the teaching and learning process without administrative, institutional, community, and state support. Institutions can facilitate integration by considering new policies for delivering integrated instruction. Integrated academic and vocational instruction also requires the cooperation of local schools and state-level policy boards. On the community level, administrators can obtain direction for their integration efforts by working with the business community to determine competencies needed by local employers. A second myth is that integration will result in the loss of teaching positions. In reality, enrichment rather than elimination describes the nature of teaching positions in an integrated education system. A final myth is that integration results in the majority imposing their will on the minority. Partnerships are the key to successful integration efforts. One technique fostering cooperation and collaboration is to use the consensus strategy approach. (YLB)

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Integration of Academic and Vocational Education
Myths and Realities

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ERIC Clearinghouse on Adult, Career, and Vocational Education

Myths and **REALITIES**

by Bettina A. Lankard *1994*

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INTEGRATION OF ACADEMIC AND VOCATIONAL EDUCATION

Although most educators support the concept of integrating academic and vocational education and recognize the benefits it affords students, implementation of integrated curriculum and instruction is seen as problematical. Disciplinary specialization, status differences among teachers, and lack of leadership are some of the stumbling blocks noted by Grubb and Kraskouskas (1993). This ***Myths and Realities*** highlights some of the "tales" that discourage integration and discusses the "truths" about what is involved in the implementation process.

Myth: Successful Integration Relies Solely on Teacher Commitment and Cooperation

Although teachers play a significant role in integrating academic and vocational education, they cannot effect significant change in the teaching and learning process without administrative, institutional, community, and state support. Traditionally, the academic curriculum and vocational curriculum have been offered in significantly different ways. To merge the two in an integrated approach to education requires new forms of organizational delivery. Integration involves restructuring, wherein the administrator becomes more of a facilitator than a director, providing teachers with opportunities that will empower them in their efforts. Some activities recommended to facilitate integration are the following (Finch et al. 1992):

- Appoint a variety of teachers from both academic and vocational education to serve on committees so that each area is equally represented.
- Bring together a team of teachers to write curriculum in team work sessions, thereby providing opportunities for teachers to learn from each other and to develop mutual respect for their unique areas of expertise.
- Provide professional development opportunities to help teachers develop the competencies required for integrating curriculum and instructional methods.

No matter how enthusiastic and committed teachers are to the concept of academic and vocational integration, their success demands that they acquire new skills and expand their knowledge to include information across the disciplines. Daugherty and Wicklein (1993), for example, found that the math and science teachers in their study lacked understanding of technology education and how to integrate the disciplines. Since team teaching is a requirement of most integrated courses, teachers must receive training in ways to integrate learning concepts (Lankard 1993). Workshops to address these issues should be initiated and encouraged for teachers' professional development. For example, teachers who have had training and experience in integrating academic and vocational education might offer workshops for teachers new to the process on such topics as team building, networking, collaboration, and problem solving, or on content-specific topics relevant to joint efforts.

Institutions can facilitate integration by considering new policies for delivering integrated instruction. For example academic instruction typically involves only in-school experiences whereas vocational education has traditionally included in-school skills instruction and out-of-school work experiences. Academic curriculum is offered in comprehensive high schools and general high schools; vocational curriculum uses these two environments plus vocational high schools and area vocational centers. Restructuring for integration may require that institutions move classroom locations of both academic and vocational teachers so they will have more ready access to one another (Schmidt et al. 1992).

Integrating academic and vocational instruction also requires the cooperation of local schools and state-level policy boards. In the past, lack of state-level policy reinforcing integrated curriculum and instructional delivery has been a barrier to implementation. Other barriers include turf issues that separate state-level boards of vocational education from departments of education in many states (Love and Gloeckner 1992).

On the community level, administrators can obtain direction for their integration efforts by working with the business community to determine competencies needed by local employers. Some states are pooling funds to address the criticisms of business and industry leaders who say that many students lack adequate academic skills when they enter the work force. The Center for Occupational Research and Development and the Agency for Instructional Technology were involved in the development of an applied academics curriculum package on Principles of Technology, for example, which used approximately $3.5 million in pooled funds for its initial development (ibid.).

Myth: Integration Will Result in the Loss of Teaching Positions

Enrichment rather than elimination describes the nature of teaching positions in an integrated education system. Teachers must recognize and experience personal benefits as a result of team teaching and interdisciplinary teamwork so they can develop confidence in the value of their performance in integrating academic and vocational education. Those who fear loss of position due to integration will be reluctant to give it their full support. Professional development is one way to expand the expertise (and confidence) of teachers entering into a new form of education delivery. The Southern Regional Educational Board State Vocational Education Consortium found that teaming academic and occupational teachers to make learning more relevant to students in their classes reaped rewards for the teachers as well as benefits for the students. As a result of this approach, "teachers reported that they

learned new strategies for teaching and developed renewed enthusiasm from working together" (Maryland Department of Education 1993, p. 4). Love and Gloeckner (1992) reported on a number of studies involving joint efforts by vocational and academic teachers noting that the benefits for the participating teachers included "increased job satisfaction, increased ability to teach basics and theory, new knowledge of real world applications of theory, a more positive school climate, and acquisition of new teaching strategies" (p. 16).

Other activities to expand teacher awareness and competencies for integrated teaching and learning include cross-program visitations and workplace internships. By observing working models of integrated instruction and participating in the application of such models, teachers are able to recognize the importance of teaching all students problem-solving, teaming, communication, and technology skills.

Teacher certification requirements may be a concern to some teachers if the requirements do not reflect support of integrated curriculum and instruction. For example, some vocational teachers have restricted certificates due to limited educational background. It is important that these teachers be afforded staff development opportunities so they can be certified to teach other classes, such as applied English (Schmidt et al. 1992).

"Most models of integration do not require cross discipline certification, however, as they are based on collaboration among staff, the sharing of expertise, and joint planning and delivery" (Maryland Department of Education 1993, p. 16). Personnel exchanges are one example of collaboration across two disciplines. For example, a math (academic) teacher may exchange several hours of teaching a week with an automotive (vocational) teacher. In this exchange the academic teacher would teach the math or business content relevant to the vocational course in return for the vocational teacher's instruction in the academic course on the work application of the math (Cobb 1992).

Although the integration of academic and vocational education places varied demands on teachers, their joint effort is critical in the implementation process. Each type of teacher—academic and vocational—brings unique and specific skills and expertise to the integration process. The goal is not to eliminate one or the other but to bring them together to provide the most comprehensive program.

Myth: Integration Results in the Majority Imposing Their Will on the Minority

Partnerships are the key to successful integration efforts. Team teaching, collaborative curriculum development by teams of academic and vocational teachers, policy and practice committees composed of representatives of both academic and vocational education all require teachers to have expertise in group process skills. Finch et al. (1992) suggest that teachers can be aided in becoming full partners in schooling by acquiring knowledge and skills in areas such as "team building, problem solving, collaborative curriculum development, student learning across the curriculum, and outcome assessment. Specifically, teachers will need assistance so they can shift from instructing in an independent and autonomous manner to becoming participating members in the total school enterprise" (p. 3).

One technique fostering cooperation and collaboration is to use the "consensus strategy" approach. "Consensus strategy is a decision making strategy in which the group aims to arrive at decisions acceptable to all. It considers the views of all members and fosters an atmosphere of mutual respect. The consensus strategy contains the following steps" (Love and Gloeckner 1992, pp. 7-8): (1) brainstorming solutions; (2) evaluating the solutions as a group, discussing points as appropriate; (3) making a decision, which should be a consensus of which solution(s) to try; and (4) agreeing on how to implement the decisions.

Strong leadership can bring balance to the integration process and help to "overcome social, intellectual, and even physical barriers that can exist between the vocational and academic staff in a high school" (Cobb 1992, p. 4). Administrators can facilitate respect and involvement of teachers across various disciplines by involving both academic and vocational instructors in the integration process from the very start. Additionally, "facility or environmental integration can be encouraged by changes in buildings or laboratory settings such that two or more disciplines are taught together. For example, a vocational automotive teacher might use the physics laboratory for focus on the resistance associated with braking an automobile" (Cobb 1992, p. 9).

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